

Missouri Department of Natural Resources



PUBLIC NOTICE

DRAFT MISSOURI STATE OPERATING PERMIT

DATE: November 5, 2004

In accordance with the state Clean Water Law, Chapter 644, RSMo, Clean Water Commission regulation 10 CSR 20-6.010, and the federal Clean Water Act, the applicants listed herein have applied for authorization to either discharge to waters of the state or to operate a no-discharge wastewater treatment facility. The proposed permits for these operations are consistent with applicable water quality standards, effluent standards and/or treatment requirements or suitable timetables to meet these requirements (see 10 CSR 20-7.015 and 7.031). All permits will be issued for a period of five years, unless noted otherwise in the Public Notice for that discharge.

On the basis of preliminary staff review and the application of applicable standards and regulations, the Missouri Department of Natural Resources (MDNR), as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions. The proposed determinations are tentative pending public comment.

Persons wishing to comment on the proposed permit conditions are invited to submit them in writing to the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102, ATTN: Peter Goode, P.E., Chief, NPDES Permits and Engineering Section. Please include the permit number in all comment letters.

Comments should be confined to the issues relating to the proposed action and permit(s) and the effect on water quality. The MDNR may not consider as relevant comments or objections to a permit based on issues outside the authority of the Clean Water Commission, (see Curdt v. Mo. Clean Water Commission, 586 S.W.2d 58 Mo. App. 1979).

All comments must be postmarked by December 5, 2004 or received in our office by 5:00 p.m. on December 8, 2004. The requirement of a signed document makes it impossible to accept email comments for consideration at this time. Comments will be considered in the formulation of all final determinations regarding the applications. If response to this notice indicates significant public interest, a public meeting or hearing may be held after due notice for the purpose of receiving public comment on the proposed permit or determination. Public hearings and/or issuance of the permit will be conducted or processed according to 10 CSR 20-6.020.

Copies of all draft permits and other information including copies of applicable regulations are available for inspection and copying at DNR's website, <http://www.dnr.mo.gov/wpscd/wpcp/homewpcp.htm>, or at the Department of Natural Resources, Water Protection Program, 205 Jefferson Street, P.O. Box 176, Jefferson City, Missouri 65102, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

Public Notice Date November 5, 2004

Permit Number: MO-0098094

Kansas City Regional Office

FACILITY NAME AND ADDRESS	NAME AND ADDRESS OF OWNER
Buckner WWTF 2500 O'Donnell Road Buckner, MO 64016	City of Buckner 11 West Washington Buckner, MO 64016
RECEIVING STREAM & LEGAL DESCRIPTION	TYPE OF DISCHARGE
Fire Prairie Creek (West central tributaries to the Missouri River Basin), Sec. 13, T50N, R30W, Jackson County	Domestic, reissue

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0098094

Owner: City of Buckner
Address: 11 West Washington, Buckner, MO 64016

Continuing Authority: Same as above
Address: Same as above

Facility Name: Buckner WWTF
Address: 2500 O'Donnell Road, Buckner, MO 64016

Legal Description: NW ¼, Sec. 1, T. 1N, R. 3E, Jackson County
Latitude/Longitude: +3908.109, -93.375

Receiving Stream: Fire Creek (R) and associated wetlands
First Classified Stream and ID: Fire Creek (R) (01-2)
USGS Basin & Sub-watershed No.: 030 (1-1001)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Outfall #001 – POTW - SIC #4952

Oxidation ditch/sludge holding/sludge is land applied

Design population equivalent is 5,000.

Design flow is 500,000 gallons per day.

Actual flow is 400,000 gallons per day.

Design sludge production is 75 dry tons/year.

Actual sludge production is 43.2 dry tons/year.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

Effective Date

Stephen M. Mahfood, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

Expiration Date
MO 780-0041 (10-93)

Jim Hull, Director of Staff, Clean Water Commission

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 2 of 4	
					PERMIT NUMBER MO-0098094	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u> (Note 1)						
Flow	MGD	*		*	once/week	24 hr. total
Biochemical Oxygen Demand ₅ **	mg/L		45		once/month	24 hr. comp.
Total Suspended Solids**	mg/L				once/month	24 hr. comp.
pH – Units	SU	*		*	once/ month	grab
Dissolved Oxygen		*		*	once/ month	grab
Temperature		*		*	once/ month	grab
Ammonia as N	mg/L	*		*	once/ month	grab
<u>Instream Monitoring</u> (Note 2)						
pH – Units	SU	*		*	once/ month	grab
Dissolved Oxygen	mg/L	*		*	once/ month	grab
Temperature	°F	*		*	once/ month	grab
Ammonia as N	mg/L	*		*	once/ month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** This facility is required to meet a removal efficiency of 85% or more.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

Note 1 – These limits apply whether the plant effluent is discharged to Fire Prairie Creek, or to the associated wetlands.

Note 2 – The upstream monitoring location (S1) shall be collected just above the effluent zone of influence. The downstream monitoring location (S2) shall be approximately 0.2 mile downstream of the discharge location to Fire Prairie Creek, and below the confluence of Fire Prairie Creek and flow from the wetland associated with the Buckner WWTF.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.
2. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

 - (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 µg/L) for cyanide, cyanide ion, and cyanide gas;
 - (2) Two hundred micrograms per liter (200 µg/L) for arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, silver, tin, thallium, and uranium; five hundred micrograms per liter (500 µg/L) for antimony, cobalt, iron, manganese, and zinc; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
 - (b) That they have begun or intend to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
5. Report as no-discharge when a discharge does not occur during the report period.
6. Water Quality Standards
 - (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
 - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;

C. SPECIAL CONDITIONS (continued)

- (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
- (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
 - (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

DRAFT

WATER QUALITY REVIEW SHEET
Determination of Effluent Limits

FACILITY INFORMATION

Facility Name: Buckner WWTF NPDES #: MO-0098094

Facility Type/Description: Oxidation ditch/sludge land applied

8-Digit Huc: 10300101 County: Jackson

Legal Description: NW ¼, SW ¼, Sec. 13, T50N, R30W

Latitude/Longitude: 3908396/-09410375

Water Quality History And Special Problems: Stream survey in 1999 showed no impact on
the receiving stream.

OUTFALL CHARACTERISTICS

Outfall	Design Flow (Cfs)	Treatment Type	Receiving Waterbody	Main Contaminant Of Concern
001	0.77	secondary	Fire Prairie Creek	BOD, TSS

RECEIVING WATERBODY INFORMATION

Waterbody	Class	7q10 (Cfs)	*Designated Uses	Other Characteristics
Fire Prairie Creek	P	<0.1	aql, lwv	

*Cool water fishery (clf), cold water fishery (cdf), irrigation (irr), industrial (ind), boating & canoeing (btg), drinking water supply (dws), whole body contact recreation (wbc), protection of warmwater aquatic life and human health (aql), livestock & wildlife watering (lwv)

PERMIT LIMITS AND INFORMATION

TMDL Watershed: Yes No x Disinfection Waiver: Yes No NA x
W.L.A. Study Conducted: Yes No 303d Waterbody: Yes No NA x
Disinfection Required: Yes No x Violations: Yes No x

Outfall #001

Wet Test: Yes ☐ No ☒ Frequency: _____ A.E.C. _____ Limit: _____

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
Flow	monitor only		monitor only
BOD		45	30
TSS		45	30
pH	6.0 to 9.0		
Dissolved Oxygen	monitor only		monitor only
Temperature	monitor only		monitor only
Ammonia as N	monitor only		monitor only

RECEIVING WATER MONITORING REQUIREMENTS

Site (S1)

Parameter(S)	Sampling Frequency	Sample Type	Location
pH	once/mo	grab	upstream of outfall
Dissolved Oxygen	once/mo	grab	upstream of outfall
Temperature	once/mo	grab	upstream of outfall
Ammonia as N	once/mo	grab	upstream of outfall

Site (S2)

Parameter(S)	Sampling Frequency	Sample Type	Location
pH	once/mo	grab	0.2 mi downstream of outfall
Dissolved Oxygen	once/mo	grab	same
Temperature	once/mo	grab	same
Ammonia as N	once/mo	grab	same

Derivation and Discussion of Limits

THE EFFLUENT LIMITATIONS OF THE CURRENT PERMIT ARE RETAINED.

Reviewer: Jerry Croy
Date: October 22, 2004
Unit Chief: Richard J. Laux

Monitoring and effluent limits contained within this document have been developed in accordance with EPA guidelines using the best available data and are believed to be consistent with Missouri's Water Quality Standards and Effluent Regulations. If additional water quality data or anecdotal information are available that may affect the recommended monitoring and effluent limits, please forward these data and information to the author.